

REMARKS

Applicants have amended claims 1, 10, 13 and 16. Support for the amendments is found e.g., in paragraph [0029], Figure 1 and Example 1 of the application

Claims 1-3, 7-12 and 17-18 stand rejected under 35 U.S.C. § 102 for purportedly being anticipated by United States Patent 5,400,175 ("Johansen et al."). The Examiner contends that the term "selectively" is not explicitly defined within the claims and does not constitute a limitation capable of distinguishing the present invention from the prior art. Applicants respectfully disagree but to expedite prosecution, Applicants have amended the independent claims to explicitly recite selective blocking of "more than 50% of incident wavelengths of light having a wavelength less than at or about 530 nm, while transmitting more than 50% of non-blocked wavelengths of light". Support for this amendment, is found e.g. in paragraph [0029], Figure 1 and Example 1 of the published application.

Anticipation under 35 U.S.C. §102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention.

Electro Med. Sys. S.A. v. Cooper Life Sciences,
32 USPQ2d 1017, 1019 (Fed. Cir. 1994)

Johansen et al. fails to teach the claimed invention as described in the currently amended claims. Johansen et al., is directed to sunglasses that do not block more than 50% of the incident wavelengths of light having less than at or about 530nm while transmitting more than 50% of non-blocked wavelengths of light, as recited in the claims. In fact, the glasses of Johansen et al. block more than 50% of all wavelengths of light. Accordingly, Johansen et al. does not teach each and every limitation of the claim invention and thus does not anticipate claims 1-3, 7-12 or 17-18.

Further, there is no teaching or motivation to modify Johansen et al. to obtain the device of the present invention. Johansen et al.'s teachings at column 6, lines 44-51 regarding melatonin are highly misleading. As previously discussed, the secretion of melatonin in humans is circadian, with high levels at night and low levels in the morning. Johansen et al. teaches sunglasses, which are not worn during peak melatonin production times. Accordingly, sunglasses (i.e. glasses worn during the day to limit transmission of natural sunlight) are clearly not relevant to the problem addressed by the present invention and a person skilled in the art would not look to a reference directed to sunglasses when addressing the serious problems that can arise from suppression of melatonin production, particularly due to exposure to a lighted night environment (to which the Johansen et al. device is clearly not applicable).

In view of the foregoing amendments and remarks, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of the claims under 35 U.S.C. § 102.

Claims 13 and 14 stand rejected under 35 U.S.C. § 102(e) for purportedly being anticipated by United States Patent 6,902,296 ("Searfoss, III"). Claim 15 stands rejected under 35 U.S.C. § 103(a) for purportedly being obvious in view of Searfoss, III. Applicants respectfully disagree.

Claim 13 has been amended to recite selective blocking of "more than 50% of incident wavelengths of light having a wavelength less than at or about 530 nm, while transmitting more than 50% of non-blocked wavelengths of light."

The main features of the device taught in Searfoss, III ('the Searfoss device') are provided at column 2, lines 11-19:

The nightlight includes a housing, one or more lamps for producing a plurality of light modes, a central processor for controlling the operation of the one or more lamps, one or more controls for allowing a user to select the desired lamp modes, and a power supply.

As an alternative to a number of lamps, light filters may be used with a single lamp to create the three specific light modes of the Searfoss device, which vary in light frequency and intensity (column 3, lines 8-10). As will be expanded on below, in none of the three operating modes does the Searfoss device anticipate the present device as recited in the claims.

The first mode of the Searfoss device is identified as a “sleep readiness mode”. In this mode, the Searfoss device produces light substantially from the blue (approximately 475 nm) and yellow (approximately 570 nm) portions of the light spectrum (column 5, lines 16-19). Clearly, the Searfoss device in this mode does *not* selectively block more than 50% of the incident wavelengths of light having a wavelength *less than at or about 530 nm*, while transmitting more than 50% of non-blocked wavelengths of light. In fact, it produces light in the selectively blocked wavelengths.

The second mode of the Searfoss device is identified as a “sleep help mode”. In this mode, dim monochromatic light in the blue to green visual light band stretching from approximately 450 nm to 540 nm is produced (column 5, lines 35-38). Clearly, the device does *not* selectively block more than 50% of the incident wavelengths of light having a wavelength *less than at or about 530 nm*, while transmitting more than 50% of non-blocked wavelengths of light. In fact, it produces light in the selectively blocked wavelengths.

Finally, the Searfoss device includes a “light mode” for “promoting wakefulness”. In this mode, a substantially white light at an intensity brighter than the light produced during the sleep readiness mode or sleep help mode is produced (column 5, lines 62-65). Clearly, in the light mode, the Searfoss device does *not* selectively block light having a wavelength less than at or about 530 nm. It does not block any wavelengths of light. Accordingly, the available operating modes of the Searfoss device fail to anticipate the present invention.

The Examiner cites Searfoss, III, column 1, lines 21-43 to support her rejection but, the cited text is nothing more than a general statement that light affects melatonin production and that the hormone has physiological effects and is released during the period of darkness. There is no teaching or suggestion that the Searfoss device can be used to affect melatonin production at night. In fact, the only suggested use of the Searfoss device in relation to melatonin production is its use to impede melatonin production; in this regard, it is noted in the Description that “very bright light has been found to retard the production of melatonin in the body and assists in resetting a person’s biological clock” (column 3, lines 3-5). Searfoss, III does not even suggest the use of a light device for inhibiting the suppression of melatonin production caused by exposure to a lighted environment at night. While Searfoss, III mentions melatonin production to provide the patent with what the Applicants would characterize as a “scientific gloss”, at best, the device could be used to improve a subject’s sleep regime through psychological effects (for which there is no evidence provided). As such, Searfoss III fails to teach or suggest the invention as currently claimed.

In view of the foregoing remarks and amendments to the claims, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of Claims 13 and 14 under 35 U.S.C. § 102(e) and Claim 15 under 35 U.S.C. § 103(a).

Claim 16 stands rejected under 35 U.S.C. § 103(a) for purportedly being obvious in view of United States Patent 6,019,476 (“Kirschner”). Applicants respectfully disagree.

“[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely non-obvious [United States v. Adams 383 U.S. 39, 40 (1966)].”

KSR Int’l Co. v Teleflex Inc. 550 U.S. _____, 18 USPQ2d 1385 (2007).

Kirschner teaches the use of a light filter associated with a fluorescent light source for providing “full spectrum lighting”, while limiting exposure to UV radiation. Kirschner teaches that full spectrum light can regulate melatonin levels (column 2, lines 42-44). This clearly teaches away from the present invention, which claims a device that inhibits the suppression of melatonin, which would be caused by exposure to full spectrum light at night. The Examiner cites an unsubstantiated teaching in U.S. Patent 5,274,403 ("Gott") which states, “melatonin is most effectively suppressed at those wavelengths peaking at substantially 509 nanometers i.e. 500-520 nanometers”. Such a teaching does *not* equate with a teaching that selectively blocking wavelengths of light below 530 nm will inhibit the suppression of melatonin. Respectfully, Applicants believe the Examiner has inappropriately ignored the fact that Gott clearly teaches away from the present invention.

The cited art must be considered for all that it teaches and the Examiner is not permitted to pick and choose from those teachings only so much that would render the claims obvious.

ATD Corp. v. Lydall, Inc. 48 USPQ2d 1321 (Fed. Cir. 1998)

The Gott lens only allows transmission of wavelengths of light between at most 400 nm and 600 nm (see e.g. the Abstract). Respectfully, the Examiner has avoided this issue (i.e. the problem of teaching away) by not actually citing the reference, but merely pointing to it as evidence of a purported rationale for modifying the primary reference. Gott cannot properly be seen as a reference for the teaching or rationale proposed. Applicants note that the teachings of the prior art are in conflict as to the effects that various properties of light have on melatonin suppression and, accordingly, it is not appropriate for the Examiner to consider only one reference without weighing the suggestive power of other references (see MPEP § 2143.01 II). Neither Kirschner nor Gott teach that selectively blocking wavelengths of light below 530 nm will inhibit the suppression of melatonin from exposure to light at night. The Examiner has

improperly combined a reference that clearly teaches away from the present invention within a reference that teaches nothing more than use of a pigment filter to achieve "full spectrum fluorescent lighting". Clearly, there is no teaching or motivation in Kirschner that would enable a person skilled in the art to reach the present invention. Gott clearly does not provide such a teaching and motivation, as it teaches away from the present invention. As such Kirschner fails to render the claimed invention obvious.

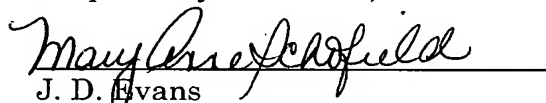
In view of the foregoing remarks, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of Claim 16 under 35 U.S.C. § 103(a) for purportedly being unpatentable over Kirschner.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #101648.55966US).

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